

## CLAIMS

## 1. An elevator comprising:

a cage vertically moving in a cage moving space arranged in an elevator shaft, and having at least one cage-side sheave;

a counterweight vertically moving in a counterweight moving space arranged beside the cage moving space in the elevator shaft, and having at least one counterweight-side sheave;

a diverting sheave disposed above the counterweight moving space;

a pair of upper sheaves disposed in a top part of the counterweight moving space;

a hoist disposed in a space in the elevator shaft other than both the cage moving space and the counterweight moving space, and having a drive sheave positioned below the pair of upper sheaves; and

a main rope successively wound around the cage-side sheave, one of the pair of upper sheaves, the drive sheave, the other upper sheave, the counterweight-side sheave and the diverting sheave, said main rope having a first end fastened to an upper part of the elevator shaft and a second end fastened to the counterweight.

## 2. An elevator comprising:

a cage vertically moving in a cage moving space arranged in an elevator shaft, and having at least one cage-side sheave;

a counterweight vertically moving in a counterweight moving space arranged beside the cage moving space in the elevator shaft, and having a plurality of counterweight-side sheaves;

a plurality of diverting sheaves disposed above the counterweight moving space;

a pair of upper sheaves disposed in a top part of the counterweight moving space;

a hoist disposed in a space in the elevator shaft other than both the cage moving space and the counterweight moving space, and having a drive sheave positioned below the pair of upper sheaves; and

a main rope successively wound around the cage-side sheave, one of the pair of upper sheaves, the drive sheave, the other upper sheave, one of the counterweight-side sheaves, one of the diverting sheaves, the other counterweight-side sheave, and the other diverting sheave, said main rope having a first end fastened to an upper part of the elevator shaft and a second end fastened to the counterweight.

3. The elevator according to claim 1 or 2, wherein the cage-side sheaves are a first cage-side sheave and a second cage-side sheave disposed at opposite side positions, respectively, on a bottom surface of the cage, and a part of the main rope wound around the first cage-side sheave has a free end fastened to a fixed part in an upper part of the elevator shaft.

4. The elevator according to any one of claims 1 to 3, wherein the counterweight moving space is on a side of one of sidewalls of the cage.

5. The elevator according to any one of claims 1 to 4, wherein the counterweight moving space is on a side of a back wall of the cage opposite a front wall of the cage provided with an exit door.

6. The elevator according to claim 5, wherein a diverting sheave is disposed at a position above the second cage-side sheave in an upper part of the elevator shaft, and the main rope is guided to the counterweight moving space on the side of the back wall of the cage opposite the front wall of the cage provided with an

exit door by the second cage-side sheave and one of the upper sheaves.